edii SMITH INTERNATIONAL, INC

MZ77/31654

TO:

Ronald Eyre

FROM:

Monica Landry

DATE:

June 17, 1997

SUBJECT: CONCEPT NO. 97-ME60

Cutting Element With Canted Design For Improved Braze

Contact Area

Thank you for submitting the subject concept. It has been assigned the number listed above and a copy is attached for your file.

Your concept will be sent to the Concept Committee Members for review prior to the monthly Committee Meeting and also to "expert" reviewers who have knowledge in the particular field.

You will promptly be notified of any decisions reached by the Concept Committee:

** NOTICE **

If you know, or at any time in the future, have any knowledge of reduction to practice, lab and/or field test results and especially DATES OF SALES with the features of your concept, submit this information immediately to Patent Services. It is important that the appropriate, subject concept number be referenced on all such information so that it can be properly filed in your concept file.

You will receive a written letter of invitation to a future Concept Committee Meeting at which time you, or your designated representative, can explain the technical merits of the subject concept. A specific time will be assigned, allowing for a 5minute presentation and a 5-minute questions and answer period.

If you have any questions regarding this concept, feel free to call Patent Services at (713) 233-5337.

·m1 attachment

DISCLOSURE OF IN	
SMATH INTERNATIONAL TYPE. PATENT SERVICES CHARGEST	CONCEPT NO 97-ME LA
	Page 1 of
	Date Docketed

Inventor's Name Emp. # Dept. # Ext. Supervisor
Ronald K. Eyre 185 850 224 Nathan Anderson

1. TITLE:

Cutting Element with Canted Design for Improved Braze Contact Area

- 2. DESCRIPTION OF INVENTION: (Attach additional sheets or drawings if necessary)
 A cutting element typically used for matrix body drill bits in which the diamond table is canted so that there is increased braze area without sacrificing the positive effects of a thick (>.040") diamond table.
- 3. LIST RELATED PRIOR ART PATENT NUMBERS (This portion MUST be completed prior to submittal):

5,605,199

5,590,728

5,494,477

4. PROBLEMS EXISTING WITH PRIOR ART:

As abrasive material thickness is increased, the cutter retention in the bit becomes more of a problem. This is due to the fact that braze area is decreased as well as problems with diamond table overhang on the cutter pocket.

				CONCEPT	Г NO	
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5 DESCR	JBE HOW PROBLEM DVANTAGES:	S ARE SOL	VED BY PRESENT	INVENTION	AND	
The problem	n of having a reduced broof the thicker diamond ta	aze area and co ble.	itting table overhang	is eliminated w	hile still taking	
6 DATES						
A .	Conception: 5/13/9	7	Identify firs	Identify first sketch or drawing: 5/13/97		
В.	First Disclosure: 5/13	/97	To whom?:	Kesh Kesha Jim Hoen	van	
	How: Verbal and ske	tch				
C .	Reduction to practice	, started:				
	Completed:					
D.	Lab or Field Test: Results:					
	7 INVENTORS		EXPLAINED	AND UNDERS	TOOD BY	
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